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ARRIS 3871 Lakefield Drive Suwanee, GA 30024			EXAMINER KAY, MARY ANNE	
			ART UNIT 2426	PAPER NUMBER
			NOTIFICATION DATE 02/25/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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mirho@fspllc.com

Office Action Summary	Application No. 10/579,214	Applicant(s) AABY ET AL.	
	Examiner MARY ANNE KAY	Art Unit 2426	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10 and 12-16 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to an AMENDMENT entered January 6, 2010 for the patent application 10/579214 filed on May 12, 2006.
2. The First Office Action of October 6, 2009 is fully incorporated into this Office Action by reference.

Claim Objections

3. Claims 6 and 7 are objected to because of the following informalities:
 - Claim 6, "content on demand system of claim 5" should be corrected as -- content on demand system of claim 1 -- .
 - Claim 7, "content on demand system of claim 5" should be corrected as -- content on demand system of claim 1 -- .Appropriate correction is required.

Status of Claims

4. Claims 1-4, 6-10 and 12-16 are pending in this application.

Claim Rejections - 35 USC § 102

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hendricks et al. (U.S. Patent 5,600,364, referred to as **Hendricks**).

Claim 1

Hendricks anticipates:

logic to compose information about multiple audio and/or video streams into an audio and/or video stream format (**Hendricks** Fig. 14, el. 396; Abstract, C15:22-40; Examiner's Note (EN): There are hundreds of channels of programming are managed in the system); and

logic to communicate the information about multiple audio and/or video streams to a plurality of set top boxes (**Hendricks** Fig. 4-7; Abstract, C15:22-40; EN: Multiple set top boxes are managed in the system); and

logic to alternatively deliver the information about multiple audio and/or video streams on a first tunable channel and on a second tunable channel (**Hendricks** Fig. 8a el. 1046, 1048; C7:1-14, C12:51-C13:5; EN: multiple channels shown on menu)

Claim 2

Hendricks anticipates:

information about content categories (**Hendricks** C8:54-C9:8).

Claim 3

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Hendricks anticipates:

information about audio and/or video titles (**Hendricks** Fig. 8b, el. 1052; C24:3-10).

Claim 4

Hendricks anticipates:

logic to compose an index of audio and/or video information into the audio and/or video stream format (**Hendricks** C8:54-C9:8, C12:7-50).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hendricks in view of Aggarwal et al. (U.S. Patent 6,631,413, referred to as **Aggarwal**).

Claim 6

Hendricks teaches:

information about content categories (**Hendricks** C8:54-C9:8; EN: Although the delivery logistics are different from direct set top delivery of menu

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information, the information will remain the same regarding the programming).

Claim 7

Hendricks teaches:

information about audio and/or video titles (**Hendricks** Fig. 8b, el. 1052; C24:3-10; EN: Although the delivery logistics are different from direct set top delivery of menu information, the information will remain the same regarding the programming).

Claim 8

Hendricks teaches:

the index of audio and/or video information (**Hendricks** C8:54-C9:8).

Hendricks fails to teach:

logic to alternatively deliver the index of audio and/or video information on a first tunable channel and on a second tunable channel.

Aggarwal teaches:

logic to alternatively deliver the index of audio and/or video information on a first tunable channel and on a second tunable channel (**Aggarwal** C3:66-C4:10; EN: Examiner interprets transmitting digital objects over TV channels as analogous to delivering programming schedule information to a set top box. Set top terminal applies template to information. ¶ 14. applies).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Hendricks** with the transmission of information over tunable channels as taught by **Aggarwal** providing utilizing spare bandwidth in a broadcast environment such as cable TV, satellite TV, or TV via the airwaves as a means of delivery.

Claim Rejections - 35 USC § 103

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hendricks** in view of Ellis et al. (U.S. Patent 2004/0117831 A1, referred to as **Ellis**).

Claim 9

Hendricks fails to teach:

logic to receive from a set top box a request for an audio and/or video stream,
the request comprising an identifier of a title of the audio and/or video stream.

Ellis teaches:

logic to receive from a set top box a request for an audio and/or video stream,
the request comprising an identifier of a title of the audio and/or video stream (**Ellis** ¶ 0101, 200 EN: Program guide includes an identifier of the title associated with the program along with other information associated with that program).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Hendricks** with the request for

the stream and the identifier by title as taught by **Ellis** providing information from the menu being sent to the headend or server for the program request.

Claim Rejections - 35 USC § 103

9. Claim 10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hendricks** in view of Curreri (U.S. Patent 6,817,027, referred to as **Curreri**).

Claim 10

Hendricks teaches:

logic to tune to a channel comprising an index of audio and/or video information having a format of audio and/or video streams (**Hendricks** C16:10-24), to read the index (**Hendricks** C16:10-24), and to apply the index to identify one or more channels comprising information describing audio and/or video content (**Hendricks** C12:7-50); ; and logic to read information from the channel comprising an index of audio and/or video information (**Hendricks** C16:10-24); and, to read the index from the alternate channel (**Hendricks** C16:10-24).

Hendricks fails to teach:

when the channel contains an indication of invalid information, to tune to an alternate channel comprising the index in the format of audio and/or video streams.

Curreri teaches:

when the channel contains an indication of invalid information, to tune to an alternate channel comprising the index in the format of audio and/or video

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streams (**Curreri** Fig. 5, 6, el. 26, 23; EN: User tunes to an alternate channel).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Hendricks** with the invalid channel as taught by **Curreri** providing the local status of the channel.

Claim 12

Hendricks teaches:

logic to tune to a channel comprising information about at least one audio and/or video stream (**Hendricks** C16:10-24),
the information about at least one audio and/or video stream formatted as an audio and/or video stream (**Hendricks** Fig. 14, el. 396; Abstract),
read the information about the at least one audio and/or video stream (**Hendricks** C16:10-24), and
display the information about the at least one audio and/or video stream (**Hendricks** C16:10-24).

Claim 13

Hendricks teaches:

logic to read information from the channel and, when the channel contains an indication of invalid information (**Hendricks** C12:7-50),
to tune to an alternate channel comprising the index in the format of audio and/or video streams (**Hendricks** C12:7-50; EN: Examiner interprets

demographic information targeting switching as “invalid information” causing a channel change to an alternate channel), and to read the index from the alternate channel (**Hendricks** C12:7-50; EN: Examiner interprets demographic information targeting switching as “invalid information” causing a channel change to an alternate channel).

Claim 14

Hendricks teaches:

logic to read the information about the at least one audio and/or video stream from the channel (**Hendricks** C12:7-50) and, when the channel contains an indication of invalid information, to tune to an alternate channel comprising the information about the at least one audio and/or video stream (**Hendricks** C12:7-50; EN: Examiner interprets demographic information targeting switching as “invalid information” causing a channel change to an alternate channel), and to read the information about the at least one audio and/or video stream from the alternate channel (**Hendricks** C12:7-50; EN: Examiner interprets demographic information targeting switching as “invalid information” causing a channel change to an alternate channel).

Claim Rejections - 35 USC § 103

10. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hendricks** in view of Hamilton (U.S. Patent 7,305,357, referred to as **Hamilton**).

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Claim 15

Hendricks teaches:

logic to locate in a content index a channel comprising audio and/or video title information (**Hendricks** C18:60-C19:7), and
to tune to the channel comprising the audio and/or video title information (**Hendricks** C18:60-C19:7), and
to locate the audio and/or video title information in the channel comprising the audio and/or video title information (**Hendricks** C18:60-C19:7),
to apply the audio and/or video title information in a request communicated to an on-demand server system (**Hendricks** Fig. 8b; EN: User can request a hit movie).

Hendricks fails to teach:

a service group identifier

Hamilton teaches:

a service group identifier (**Hamilton** C8:18-4. C9:33-40; EN: Group identifier of RF channel group)

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Hendricks** with the service group identifier as taught by **Hamilton** providing the RF channel group allocated for use in delivery of content on-demand to customers for each distribution node of network.

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Claim 16

Hendricks teaches:

logic to locate in the content index an alternate channel comprising audio and/or video title information (**Hendricks** C12:7-50), and

to tune to the alternate channel comprising the audio and/or video title

information when the channel comprising the audio and/or video title

information comprises an indication of invalid data (**Hendricks** C12:7-50;

EN: Examiner interprets demographic information targeting switching as

“invalid information” causing a channel change to an alternate channel.

Examiner interprets searching to include title search. ¶ 14. applies).

Response to Arguments

11. Applicant's arguments filed January 6, 2010, have been fully considered.

In reference to Applicant's argument:

35 U.S.C. 102(b)

Claims 1-4 and 10-14 are rejected under 35 U.S.C. 102(b) as being allegedly anticipated by Hendricks et al. (U.S. Patent 5,600,364, referred to as Hendricks).

Claim 1 and Dependents

Claim 1 (and its dependent claims) describe a content on demand system including logic to alternatively deliver information about multiple audio and/or video streams on a first tunable channel and on a second tunable channel. The Office Action acknowledges that this is not a feature of Hendricks.

The Applicant respectfully asserts that it is not a feature of Aggarwal, either. The Office Action cites col. 3, 4 of Aggarwal for this feature, but here is found merely a description of channel bandwidth varying in predictable fashion over time. There is no teaching in Aggarwal of logic to alternatively deliver information about multiple audio and/or video streams on a first tunable channel and on a second tunable channel. Notice the claim features: it is information about content, not the content itself, that is delivered on alternate tunable

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channels. These are very unique and novel features, especially in combination, and they aren't even suggested in Aggarwal .

Claim 10 and Dependents

Claim 10 (and its dependent claims) describes a set top box including logic to read information from a channel comprising an index of audio and/or video information and, when the channel contains an indication of invalid information, to tune to an alternate channel comprising the index in the format of audio and/or video streams, and to read the index from the alternate channel. These are not features disclosed or suggested in Hendricks.

The Applicant respectfully points out the precise claim language: reading from a channel comprising an index of audio and/or video information when the channel (meaning the channel with the index) contains invalid information (the specification describes this as invalid index information), and tuning to an alternate channel comprising the index in the format of audio and/or video streams when the first channel index is invalid. Under best practices of the Patent Office, the Examiner is not at liberty to ignore claim features when making a rejection, or to interpret claim features in unreasonable ways. It is not reasonable to interpret "invalid information" in the present claims as equivalent to demographic information in Hendricks (see Office Action).

35 U.S.C. 103(a)

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Hendricks in view of Aggarwal et al. (U.S. Patent 6,631,413, referred to as Aggarwal). Claim 9 is rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Hendricks in view of Ellis et al. (U.S. Patent 2004101 17831 A1, referred to as Ellis).

Claims 5-9 depend from claim 1 and are thus patentable over the cited references for at least the same reasons as claim 1. Ellis does not teach the features of claim 1 lacking in Hendricks or Aggarwal.

Claims 15-16

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Hendricks in view of Akiyama et al. (U.S. Patent 5,784,464, referred to as Akiyama).

The Applicant respectfully disagrees that Akiyama discloses applying the audio and/or video title information and a service group identifier in a request communicated to an on-demand server system. A service group as used in the present claims is not the same as a service provider id as used in Akiyama. The Applicant urges the Examiner to read the claim language in light of the specification for an understanding of "service group identifier" (e.g. id of a regional content distribution group). While it is best practices of the Patent Office to give claims their broadest reasonable interpretation during examination, it is not appropriate to go beyond what is reasonable in light of the specification and common meaning in the arts. Akiyama also fails to disclose combining a service group identifier with an audio or video title in a request to an on-demand server.

Examiner's Response:

The new part of claim 1 which reads in part: "logic to alternatively deliver the information about multiple audio and/or video streams on a first tunable channel and on

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a second tunable channel” has been rejected by Hendricks et al. (U.S. Patent 5,600,364) Fig. 8a el. 1046, 1048; C7:1-14, C12:51-C13:5.

The rejection of claim 10 is withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hendricks et al. (U.S. Patent 5,600,364) and Curreri (U.S. Patent 6,817,027).

The rejection of claim 15 is withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hendricks et al. (U.S. Patent 5,600,364) and Hamilton (U.S. Patent 7,305,357).

The rejections of dependent claims 2-4, 6-9 12-14 and 16 are not withdrawn because independent claims 1, 10 and 15 have been rejected.

Examination Considerations

12. The claims and only the claims form the metes and bounds of the invention.

“Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969) (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4).

The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the

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art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

13. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

14. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

15. Examiner's Opinion: ¶¶ 12.-14. apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence Information

17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to MARY ANNE KAY whose telephone number is (571)270-5677. The Examiner can normally be reached on Monday - Friday, 8:00 AM - 5:00 PM, EST.

As detailed in MPEP 502.03, communications via Internet e-mail are at the discretion of the Applicant. Without a written authorization by Applicant recorded in the

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Applicant's file, the USPTO will not respond via e-mail to any Internet correspondence which contains information subject to the confidentiality requirement as set forth in 35 U.S.C. 122. A paper copy of such correspondence will be placed in the appropriate patent application. The following is an example authorization which may be used by the Applicant:

Notwithstanding the lack of security with Internet Communications, I hereby authorize the USPTO to communicate with me concerning any subject matter related to the instant application by e-mail. I understand that a copy of such communications related to formal submissions will be made of record in the applications file.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Joseph Hirl can be reached on (571)272-3685. Any response to this office action should be mailed to:

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Mary Anne Kay
Examiner

/Joseph P. Hirl/
Supervisory Patent Examiner, Art Unit 2426
February 17, 2010